

Systems Engineering and Architecture Compliance (23 CFR 940.11) Checklist

Prior to design for all federally funded Intelligent Transportation Systems (ITS) projects, a Systems Engineering and Architecture Compliance Checklist or Report (depending on the complexity of the project) must be submitted to the Federal Highway Administration (FHWA) as part of the Federal Authorization paperwork. Prior to FHWA submittal, this Checklist needs to be completed and submitted to Arizona Department of Transportation (ADOT) Transportation Technology Group (TTG) Manager for review and approval. This Checklist is in lieu of a Systems Engineering Report.

Section 1 – Project Information	
1.1a ADOT Project Manager and Contact Information:	
1.1b Consultant Project Manager and Contact Information:	
1.1c Local Public Agency Project Manager and Contact Information or <input type="checkbox"/> Not applicable	
1.2 Project Location:	
1.3 ADOT TRACS Number:	Federal-aid Project Number:
1.4 Project Description, Title, and Type of Work:	
1.5 Funding and source of each (including State and Federal):	
Fiscal Year: 20 Other (Please Specify)	
1.6 Nature of Work (select all appropriate boxes):	
<input type="checkbox"/> Software/Integration <input type="checkbox"/> Construction <input type="checkbox"/> Operations <input type="checkbox"/> Evaluations	<input type="checkbox"/> Planning <input type="checkbox"/> Equipment Upgrades <input type="checkbox"/> Preliminary Engineering <input type="checkbox"/> Other (Please Specify):
Section 2 – Regional or Statewide Architecture Conformance	
Search through the regional or statewide architecture to - confirm that the project is in conformance and to - identify the user services and service packages in the project. Review the National Architecture Service user services and service packages if needed.	
2.1 Regional or Statewide Architecture:	
<input type="checkbox"/> MAG <input type="checkbox"/> PAG <input type="checkbox"/> Statewide	

2.2 User Services Implemented:

- | | |
|---|--|
| <input type="checkbox"/> Travel and Traffic Management | <input type="checkbox"/> Emergency Management |
| <input type="checkbox"/> Public Transportation Management | <input type="checkbox"/> Advanced Vehicle Safety |
| <input type="checkbox"/> Electronic Payment | <input type="checkbox"/> Information Management |
| <input type="checkbox"/> Commercial Vehicle Operations | <input type="checkbox"/> Maintenance and Construction Management |

2.3 Service Packages Implemented:

2.4 Changes recommended to Regional or Statewide Architecture?

- ☐
- Yes
- ☐
- No

If "Yes", please specify and provide detail:

Section 3 - Participating Agencies and their Roles

3.1 Lead Agency:

3.2 Participating Agencies:

3.3 Is an Intergovernmental Agreement (IGA/JPA) Needed for this Project?

- ☐
- Existing
- ☐
- To be Developed IGA #
- ☐
- No

Please describe operational and budgetary relationships:

Section 4 – Requirements Definitions and Alternatives Analysis

4.1 Project Purpose and Need Summary

Is there a project scoping document defining the issue? ☐ Yes ☐ No

If "No", please provide information:

Is there a project scoping document defining proposed alternatives? ☐ Yes ☐ No

If "No", please provide information:

4.2 Project Documentation

	Existing	Existing to Be Modified	To be Developed	Comment/Document Reference
Feasibility Study	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Alternative Analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Concept of Operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Design / Post Design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Section 5 – Procurement

5.1 Procurement Methods:

<input type="checkbox"/> Construction Contract	<input type="checkbox"/> Procurement Contract
<input type="checkbox"/> Request for Proposal	<input type="checkbox"/> Other (Please Specify):
<input type="checkbox"/> Invitation to Bid	

5.2 Equipment to be purchased:

5.3 Procurement Contract Numbers to be used: procure.az.gov (if using existing contract)

Section 6 – ITS Standards

6.1 Which specific [National ITS Standards](#) will be used in this project such as NTCIP and IEEE?

If no National ITS Standards can be identified please explain why not:

Section 7 – Systems Testing

7.1 Systems Testing Documentation

	Existing	Existing to Be Modified	To be Developed	Comment/Document Reference
System Test Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
System Validation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Section 8 – Operational Resources

8.1 Procedures and Resources needed for Operation:

Section 9 - Schedule

9.1 Expected Completion Date:

9.2 Relationship to Other Federal, State, County, and Local Projects and Phases: (within TIP and/or 5 year program)

Section 10 – Strategic Plans for System Update

10.1 Plans for system upgrade and lifecycle ("✓" appropriate box)

	Existing	Existing to Be Modified	To be Developed	Comment/Document Reference
System Update Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Section 11 – Completed and Approved

11.1 Consultant's Name and Date

Name

Date

11.2 ADOT Transportation Technology Group Manager Signature and Date

Signature

Date